

Western Growers Association

Serving the California and Arizona Fresh Produce Industry



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Comments Submitted to the

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U.S. Environmental Protection Agency

and the

U.S. Fish and Wildlife Service

on the proposed

Water Quality Standards for Surface Waters of the Sacramento River, San Joaquin River, and San Francisco Bay and Delta of the State of California

the

Proposed Critical Habitat Determination for the Delta Smelt;
Proposed Determination of Threatened Status for the Sacramento Splittail

and

Draft Regulatory Impact Assessment of the
Proposed Water Quality Standards for the San Francisco Bay-Delta and Critical Habitat Requirements
for the Delta Smelt

Submitted to:

Mr. Patrick Wright
Bay/Delta Program Manager
Water Quality Standards Branch, W-3
Water Management Division
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, California 94105

Palma Risler
U.S. EPA, Region 9
W-3-3
75 Hawthorne Street
San Francisco, CA 94105

Acting Field Supervisor
Sacramento Field Office
U.S. Fish and Wildlife Service
2800 Cottage Way, E-1803
Sacramento, California 95825-1846

Western Growers Association (WGA) is an agricultural trade association whose members grow, pack and ship the majority of the fresh vegetables, as well as a significant amount of the fresh fruit and nuts, produced in California and Arizona.

WGA, on behalf of our membership, is pleased to submit the following comments for consideration by the U.S. Environmental Protection Agency (EPA), and the U.S. Fish and Wildlife Service (USFWS) on the proposed Water Quality Standards (Standards) for Surface Waters of the Sacramento River, San Joaquin River, and San Francisco Bay and Delta of the State of California (Bay-Delta); the proposed listing of the California population of the California splittail as threatened under the federal Endangered Species Act; the identification of critical habitat for the Delta smelt, a species listed as threatened under the federal Endangered Species Act (ESA); and the Regulatory Impact Assessment.

For the reasons detailed as follows, WGA is strongly opposed to the EPA proposed Standards as written. The proposed Standards are clearly surrogates for flow and diversion requirements which are beyond the authority of the federal government, are clearly unworkable, and would result in significant water supply impacts, requiring in dry years the draining of reservoirs if the Standards are to be met. The proposed Standards and the related ESA actions attempt to achieve environmental protection in an inflexible manner which will significantly impact the reliability of the State's water supplies. The combined affects of efforts to protect winter-run salmon, the Delta smelt, the Sacramento splittail, and the proposed Standards, if implemented, will have a very serious impact on California's economy. Protection of biological resources should be accomplished in the most balanced and cost-effective manner possible.

WGA believes that water supply impacts could and must be substantially decreased, and urges the EPA to work closely with the State to achieve environmental protection that is based on sound scientific information and minimizes unnecessary water supply and economic impacts on existing water users.

The fact that the Club-Fed agencies can and did state in public that the increasing shortages to California agriculture and urban water users, as a result of their joint proposals, will have no significant effect on California's economy is beyond belief.

The often mentioned "flexibility" is yet to be seen.

BAY-DELTA ESTUARY

The San Francisco Bay-Sacramento-San Joaquin Delta Estuary is the hub of California's water supply infrastructure and is essential to the operation of the state's economy. Two-thirds of the State's population and millions of acres of agricultural land receive part or all of their supplies from the Bay-Delta.

WGA recognizes and appreciates the ecological problems of the Bay-Delta. WGA does question, however, whether "throwing" more water at the problem based on a hypothesis that more outflow will produce more fish, with the resulting negative impacts to existing water users and the state's economy, is the appropriate solution in itself, and questions whether doing so will result in significant environmental improvement absent addressing other potentially significant factors.

ECOLOGICAL PROBLEMS OF THE BAY-DELTA

The ecological problems of the Bay-Delta are complex, and the causes are varied. Clearly some of the causative factors are attributable to water resource development projects (State Water Project (SWP), Central Valley Project (CVP), and non-project development and water use. Other causes include: agricultural drainage, levee management practices, channelization and dredging, erosion, mine drainage, municipal and industrial drainage, predation and competition, recreational use, legal and illegal fishing, etc.

While efforts have and are being made to address many of the above causes, WGA believes that the impact of introduced species must be addressed, and factored into decision-making. The Department of Water Resources has, while conducting random samples, found that 95% of the "samples" are composed of introduced species. In fact, of the eleven most populous fish species which use the Bay-Delta, eight are introduced species (including the top four). Clearly it is questionable whether the most stringent water management measures can ensure the return of ecological health and that of native species unless something is done about the competition within the Bay-Delta aquatic food chain between native and introduced species. If this is not deemed possible, then the federal government should and must rethink the requirements of the federal ESA in light of the role the Bay-Delta plays as the hub of California's water supply.

Consider the following examples of some of the exotic (introduced) species which have changed the Bay-Delta ecological balance: Potamocorbula-a clam which has changed the food chain web in the area of the Suisun Bay; Sinocalanus-an Asian copepod, which is not favored by young striped bass is displacing the copepod, Eurytemora, a food favored by young striped bass; Pseudodiaptomus-an Asian copepod, also not well-liked by young striped bass as a food source; Yellowfin Goby-feeds on young striped bass.

The striped bass is itself an introduced species which is used as an "indicator" species, and the EPA has determined that its decline is indicative of the poor health of other aquatic resources in the Bay-Delta. WGA questions whether the proposed Standards can bring about a rebound of the striped bass absent addressing the abovementioned threats to its wellbeing. A thriving striped bass

population will, of course, impact the winter-run Chinook salmon, an ESA listed species, as the bass feeds upon and competes with the salmon.

WATER SUPPLY IMPACTS

The Club-Fed agencies estimate that the proposed Standards and related actions released December 15, 1993, will reduce diversions from the Delta during time of drought by an average of 1.8 MAF per year. WGA respectfully requests that Club-Fed discontinue the use of "averages" in their public statements, as this is misleading to the general California public. The 1.8 MAF average means that during some drought years available Delta supplies will be reduced by more than 2.5 MAF, and the California public deserves to be clearly informed of the potential impact.

With the proposed federal Standards in place, as written, and using the federal impact assessment, Delta supplies during drought will meet only about 50 percent of the Delta export demand.

Analysis by the California Department of Water Resources (DWR) shows that if flexibility is not incorporated into the Standards and achieved, and the Standards are enforced as written, average available drought supplies will be reduced by more than 3 MAF a year. This would mean that available Delta supplies during a drought would satisfy only about 30 percent of demand.

The proposed Standards would effectively double the water supply loss imposed last year by the combination of the Central Valley Project Improvement Act (CVPIA) and ESA mitigation requirements for the winter-run salmon.

IMPORTANCE OF ADEQUATE AND RELIABLE WATER SUPPLY TO AGRICULTURE - ECONOMIC IMPACTS

San Joaquin Valley Study

The Northwest Economic Associates, in a second consecutive year of drought analysis, in a broad study of the effects of reduced 1992 water supplies, found that the drought cost San Joaquin Valley agriculture reductions of nearly one-half billion dollars in gross farm receipts as a result of a sixth consecutive year of drought. The droughts 1992 valley impact totaled \$371 million in revenue decreases, \$508 million in income declines, and 4,900 job losses.

The study also found that water shortages imposed as a result of ESA compliance and other environmental considerations such as the CVPIA, added substantially to water costs in 1992.

Unlike a common assumption used during some economic analyses, the Northwest Economic Associates analysis used "net" rather than

"gross" farm income in their analysis, and included water cost increases. WGA believes this method results in a more accurate picture of actual impact.

The study found that 1992 drought impacts included: on-farm revenues fell \$157.1 million; \$258.7 million spent on added water costs; and \$79.5 million spent on well-drilling and rehabilitation.

Other impacts documented included:

172,000 acres of cropland were not farmed or abandoned, impacts varying by area. Reduced yields were noted on another 33,300 acres because of the drought.

Acreage reductions resulted in a 1,600 job loss at the farm level. The \$157.1 million farm revenue loss includes a \$64 million loss in farm income.

Farm revenue decreases resulted in an additional \$144.6 million decline in San Joaquin Valley business activity, including 2,300 jobs lost and \$74.1 million in lost wages.

The crop protection and fertilizer industry alone lost sales worth \$18.1 million.

Increased water costs decreased farm income which led to a \$32.3 million reduction in farm machinery sales, costing 500 jobs and employee income losses of \$10 million. Another 500 jobs were lost as a result of \$37.7 million in other lost business activity.

The study did not fully reflect the impacts to local communities where agriculture is the dominant employer, nor did it estimate impacts of decreased farm household spending on goods and services. Nor were estimates made of long-term groundwater problems caused by overdrafting, an area WGA feels strongly should be included in a comprehensive analysis.

NOTE: The study only included the impact on areas of the San Joaquin Valley which are served by the CVP.

Case Study: Kern County

Kern County Water Agency (KCWA) is the largest SWP agricultural contractor and the third largest municipal and industrial contractor. KCWA represents 27% of the SWP contracted entitlement.

KCWA's annual financial obligation to the state is over \$60 million, \$60 million of which must be paid whether water is delivered or not.

The SWP supplies water to 600,000 acres in Kern County, where over 200 crops generate over \$6 billion in economic activity and 37,000 jobs. The SWP water delivered for crops in the County generates economic activity in excess of \$9 billion each year statewide.

Kern County water districts on the West Side, with 200,000 irrigated acres rely exclusively on SWP water. The remaining districts, with 400,000 irrigated acres, rely on the SWP to augment local supplies.

In 1990, with a 50% shortage, 30,000 acres were lost from production. In 1991, with a 100% shortage, 150,000 acres were lost from production. And, in 1992, with a 55% shortage, 100,000 acres were lost from production.

For the Kern County economy the above translates to: \$550 million of direct revenue loss; \$1.5 billion of total economic impacts; 8,000 - 10,000 job years lost; 50% of West Side land out of production; 2.5 MAF of groundwater overdraft, with 20 - 100 feet groundwater level declines.

Westlands Water District

In 1993 the Westlands Water District received only half of its CVP supply, despite the fact that it was an above-normal water year. The District has estimated that water shortages there have caused average appraised land values to drop by \$1,000 per acre. Farm equity losses total over one-half billion dollars. The drop in farm values has reduced annual property tax revenues to Fresno and King County local governments by nearly \$2 billion.

Westland Water District projects that its CVP supply will be permanently reduced by 50% if the proposed Standards requirements are added to existing ESA requirements and CVPIA requirements. A 50% loss would result in approximately 220,000 acres of productive land being taken permanently out of production. These are counties where unemployment has already reached 14.4%.

Comment:

The impact of the proposed Club-Fed actions on water supply will affect agriculture first as agricultural water supply is always the first to be cut. For the people who live and work in rural areas the supply reductions will directly and indirectly negatively impact the local economy. In urban Southern California, where a large percentage of the agricultural-related jobs reside, the negative impact will soon follow.

CALIFORNIA WATER PICTURE

DWR's California Water Plan update (Bulletin 160-93) paints a grim picture of the state's future water supplies and demands. Overall water demands are expected to increase significantly, both in the near future and long-term. The Plan forecasts a state-wide population of 36.5 million in the year 2000, 42.5 million by 2010, and 48.9 million by 2020.

It must be noted that even though there is no guarantee that even currently planned water supply facilities will ever be built, such facilities were factored into the supply and demand equation in the Plan. With increased conservation, water recycling, conjunctive use of surface water, and more storage south of the Delta the projected shortfall in 2020 would still be about 1.3 MAF to 3.3 MAF in average years, and 3.2 MAF to 5.2 MAF in drought years. Average annual water shortages on the order of 1 - 3 MAF a year will have a devastating impact on California's economy. Without additional facilities, and improved water management capabilities, the State is facing an annual shortfall of 2 MAF to 4 MAF in average years, and 5.7 MAF to 7.7 MAF in drought years.

These projections do not include the potential impacts of the proposed actions by Club-Fed which are the subject of these comments.

CALIFORNIA AGRICULTURE - IT'S IMPACT ON THE STATE ECONOMY

More than 250 crops are produced by California's farms, most on 8.5 million irrigated acres of farmland. California is the leading agricultural state in the nation, with gross farm income valued at \$17.9 billion in 1991 (down \$1 billion from 1990 due to drought/freeze). Factoring in multiplier effects, farming and related activities generated \$63.1 billion, or 9.05 percent of California's 1991 \$697 billion Gross State Product. Even in a year when total farm revenues dipped, 1991 exports brought in \$4.66 billion (valued at port of embarkation), continuing California agriculture's consistent positive contribution to the U.S. trade balance.

California agriculture employs 227,530 workers on 83,000 farms. About one in ten jobs in the state are farm- or agriculture related. Nearly 47% of these agriculture-related jobs are in Southern California. In the Central Valley, farming and agricultural processing creates nearly a third of all jobs in the region.

(Source: The Measure of California Agriculture: Its Impact on the State Economy, University of California, Division of Agriculture and Natural Resources, November 1992.)

AGRICULTURAL WATER USE

Often forgotten in the discussion of agricultural water use is the fact that the consumptive use of water by the agricultural commodities grown are ultimately consumed by the population in general. It is estimated that each Californian requires one to two acre-feet of water per year in the food he eats in addition to their urban water use (estimated from data in Water Inputs in California Food Production, Water Education Foundation, September 1991).

A measure of agricultural water efficiency is the agricultural production per unit of water. Harvested yields per acre of most California crops have more than doubled while irrigation methods have become more efficient.

Bulletin 160 predicts a reduction in water use by irrigated agriculture (statewide) of 2 MAF, primarily due to land retirement, urbanization, and improvements in agricultural efficiencies. WGA believes that this estimate may well overestimate the reduction in demand, and thus result in an understatement of actual future water shortages.

STATE WATER RIGHTS

Federal law has long recognized that states have the authority to adopt and carry out their own water policies, and govern the waters within their jurisdictions. The federal Clean Water Act, under which the EPA is proposing to establish water quality standards, also expressly recognizes the authority of states to allocate quantities of water and further states that the Act shall not be construed to supersede or abrogate rights to quantities of water which have been established by any state.

While the EPA acknowledges they have no authority to implement the proposed Standards, and that only the State Water Resources Control Board (SWRCB) has the authority to allocate water, the federal government is, in effect, by proposing a significant manipulation of the Bay-Delta ecosystem and using the ESA, seeking to control the allocation of the State's waters, an action which WGA strongly opposes.

The fact of the matter is, the federal government through its agencies and authority, has and continues to attempt to dictate State water policy in a manner which clearly shows little or no understanding of the State. The EPA has clearly implied that the State should automatically adopt and implement the proposed Standards, as they have done before, resulting in rejection of state-developed plans formulated to meet federal requirements while addressing the complexity of the State, and the requirements of State law.

ENDANGERED SPECIES ACT ISSUES

The continued use of uncoordinated and unilateral ESA authority by federal agencies is of great concern to WGA and all State water users. Understandably, agriculture's level of concern is somewhat higher than those of our urban friends.

WGA is concerned that the single-species approach being undertaken by Club-Fed may well result in negative impacts to other species, as well as other threatened and endangered species. For example, cold water storage for winter run salmon not only impacts CVP supplies, but also has impacts on fall run salmon which compete with winter run for cold water resources. In the future are we to be faced with additional water supply impacts to protect the fall run as a result of federal actions relative to the winter run?

Agricultural lands north and south of the Bay-Delta provide vital habitat for wildlife, as well as habitat for federal and state listed threatened and endangered species. Has Club-Fed considered the potential impact of their proposals on these other threatened and endangered species? Or non-listed species of "special concern"? While we realize the ESA focuses narrowly on the needs of a single species, we believe such an assessment should be made, if only to bring home this major flaw in the Act.

The federal listing of the winter run Chinook salmon and the Delta smelt, combined with the biological opinions, has seriously affected California water resources management. The opinions, which placed restrictions on water project operations, have effectively preempted short-term measures to provide environmental protections for the Bay-Delta.

While WGA realizes that Club-Fed is not soliciting comments on the winter run salmon, any discussion of water supply impacts must include this listed species as part of the overall impact of federal regulation.

As a result of the listing of the Delta smelt and the winter run Chinook salmon under the federal ESA, operational requirements (i.e. reservoir cold water releases, flows to transport juvenile fish, limits on incidental fish take at the pumps, export restrictions, etc.) have been imposed on both the SWP and the federal CVP. These operational requirements have limited the ability of the Projects to supply water, and have caused increased economic hardship to both agricultural and urban areas.

Recent history shows that constraints on Delta exports due to take limits can cost the SWP and CVP as much as 1 MAF in lost pumping opportunities in a given year.

In 1993, a year when California was blessed with a water year 150% of normal, one million acres of land in the San Joaquin Valley received 50% of their allocation.

Winter-Run Salmon

The change in the federal listing status of the winter run salmon from threatened to endangered makes unavailable the flexibility allowed under Section 4d of the federal ESA in managing threatened species.

The biological opinion for winter-run Chinook salmon imposes operational constraints upon both the SWP and CVP, requiring the closure of the Delta Cross Channel gates from February 1 through April 30 and specified flows in the western Delta. While the impact of these operational constraints are substantial, the "incidental take" requirements add a great degree of uncertainty and are of questionable scientific validity. The incidental take limit is to be no more than 1% of the "estimated" number of smolts migrating during the period of October 1 - May 31. The annual smolt "estimate" is based on the number of "estimated" adults returning the previous year to the upper Sacramento River. The number of smolts "taken" is calculated on the number of smelts salvaged at the Projects fish screens, and smolts within a certain length are "assumed" to be winter-run. A factor is applied to each fish salvaged to determine the "assumed" mortality and to determine the "calculated" take.

On such "scientific" assumptions are decisions made relative to turning off the pumps, and interrupting water delivery. (Also see Delta smelt/Sacramento splittail discussion.)

Delta Smelt

The new proposed Delta smelt biological opinion would designate virtually the entire Delta as "critical habitat". The biological opinion, which applies to both the SWP and CVP, is somewhat unclear, adding additional uncertainty about potential water supply impacts on the Projects. It appears to WGA that there is significant scientific uncertainty as to the biological and habitat factors affecting the smelt. WGA understands that the opinion could require an estimated 80,000-250,000 acre feet of additional fresh water flows, in addition to the winter-run salmon impact.

The reference to the EPA proposed salinity standard in the USFWS critical habitat designation for the Delta smelt raises a number of questions (see State Water Rights discussion). It would appear that the biological opinion for the Delta smelt would essentially require implementation of the EPA's Standards.

Like the winter run salmon, the Delta smelt biological opinion includes an "incidental" take limit. The impact on water supply is uncertain, but could be significant as the Delta smelt are in the Bay-Delta year round. Clearly the smelt take limit has great potential to make it difficult to move and store available north state water south of the Delta.

Sacramento Splittail

If the Sacramento splittail is listed, such listing will increase the likelihood of pumping restrictions, adding to the uncertainty of supply.

"X2" SALINITY STANDARD

The EPA proposes to establish a two part per thousand (X2) salinity standard that must be maintained at three locations in the Suisun Marsh. To meet this criteria, if natural conditions are not sufficient, water must either be released from storage to increase outflow, diversions upstream of the Delta must be limited, or exports must be curtailed. This salinity standard is, in reality, an attempt to regulate flows, and thus State water allocation an area beyond federal jurisdiction.

The establishment of a precise position at which X2 must be met on a daily basis is likely to be next to impossible from a Project operational perspective. Expending water to counter the daily uncontrollable tide and water supply to maintain the proposed X2 line is in our view an unnecessary and uncalled for "waste" of what is a valuable resource. The water supply impact in years with low spring runoff would be significant.

The EPA evidently has decided that it is desirable to attempt to recreate in the Bay-Delta hydrologic conditions similar to the late 1960's and early 1970's. With this goal in mind the EPA, in developing its proposed X2 standard, used 1940 through 1975 hydrology, a time period which contained no critical year types. The EPA then determined the historical average number of days for each year type and set the average as the value to be satisfied. Using this formula, and the establishment of the mean as the X2 standard, the EPA is in reality seeking to establish a water quality condition that is better than the historical period targeted.

NEED FOR COMPREHENSIVE SOLUTION

Those areas of California relying on the Bay-Delta for all or a portion of their supplies face great uncertainty of water supply and water supply reliability due to the unknown outcome of ongoing actions being undertaken by Club-Fed.

Governor Wilson, in his 1992 water policy statement, clearly stated his resolve to address the numerous problems of the Bay-Delta. To this end, the Governor appointed the Bay-Delta Oversight Council.

The Governor has further proposed that the SWRCB review the EPA proposed Standards during the Clean Water Act required triennial review, at which time the Board would review the EPA proposed Standards and the winter run salmon and Delta smelt biological opinions, etc. WGA strongly supports the Governor's proposal, and urges federal participation in both the triennial review and the process of exploring the full range of potential solutions to the ecological problems of the Bay-Delta.

REGULATORY IMPACT ASSESSMENT

Others with more expertise will present more comprehensive comments on the EPA Impact Assessment.

WGA does, however, believe that the Assessment greatly understates the economic, environmental, and social impacts of the proposed Club-Fed actions due to questionable assumptions and omissions. In addition, the conclusions drawn are often superficial. While it should go without saying -- the Club-Fed proposals will affect "real" people. California citizens deserve a comprehensive and realistic assessment of impact.

The Assessment looked at potential economic impacts for a one year time period, and did not consider the cumulative impact of prolonged shortages. The Assessment further did not fully consider the secondary economic impacts based upon the state's regional socio-economic conditions.

Increased groundwater overdraft caused as a result of surface water shortages created by the Standards is one significant area we believe must be analyzed.

The Assessment further assumes that water transfers will offset water shortages. This is truly in error, as ESA requirements which limit pumping also limit the amount of water which can be transferred through the Delta.

One has only to look at the studies conducted recently to assess the economic impact of the drought on the state to realize that the Assessment is severely deficient. The Club-Fed proposals would require additional cutbacks - producing even greater economic dislocation.

As a result of the drought farmers in the hardest hit areas went out of business, land values fell, unemployment levels skyrocketed, groundwater overdraft increased, etc. Lending institutions are currently advising CVP-dependent water users that